



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,751	02/21/2006	Franz-Josef Koerber	1034193000040	6674
21839	7590	02/07/2008	EXAMINER	
BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				BRANDT, MICHAEL J
ART UNIT		PAPER NUMBER		
2837				
		NOTIFICATION DATE		DELIVERY MODE
		02/07/2008		ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com  
debra.hawkins@bipc.com

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/568,751	KOERBER, FRANZ-JOSEF
	Examiner	Art Unit
	MICHAEL BRANDT	2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 October 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 2/21/2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show how the intermediate piece is fixed to the drive shaft of the electric motor and wherein an end of the connecting rod which faces the drive shaft can be connected to said intermediate piece at at least two distances from the central axis of the driveshaft, as disclosed in claims 8 and 16. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. It is unclear what is meant by "an end of a connecting rod which faces the drive shaft can be connected to said intermediate piece at at least two distances from the central axis of the drive shaft."

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 11-14 and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 4623859 (hereinafter Erickson).

Regarding claims 1, 5-6, and 13-14 Erickson discloses (Fig. 2) an apparatus for actuating an electrical switching device having at least one moving contact piece 18, the at least one moving contact piece 18 being driven via a rotating shaft 88, wherein an electric motor 70 having a rotating drive shaft 78, which can be coupled to the rotating

Art Unit: 2837

shaft 88 for the switching device by means of a gear mechanism 72, is provided for the purpose of driving the rotating shaft 88 to switch the switching device on and off.

Regarding claim 2, Erickson discloses the apparatus wherein, in the case of multi-pole switching devices, an electric motor is provided for the purpose of driving all of the switch poles (col. 6, lines 28-52).

Regarding claim 3, Erickson discloses the apparatus wherein, in the case of multi-pole switching devices, a separate electric motor is provided for the purpose of driving each switch pole (col. 6, lines 28-52).

Regarding claims 4 and 12, Erickson discloses (Fig. 2) the apparatus wherein the central axis of the drive shaft 78 runs parallel to the central axis of the rotating shaft 88. This is accomplished when the rotating shaft is actuated.

Regarding claims 11 and 19-20 Erickson discloses (Fig. 2) at least one apparatus for actuating purposes (e.g. 156 or 70 or 88).

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson.

Erickson discloses the apparatus wherein the lever mechanism is dimensioned such that a rotation of the drive shaft of the electric motor through a certain amount brings about a switching operation of the switching device, however, does not expressly disclose this amount being at most 180°. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the lever mechanism dimensioned such that a rotation of the drive shaft of the electric motor through at most 180° would bring about a switching operation of the switching device, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working range involves only routine skill in the art. *In re Aller*, 105 USPQ 233

8. Claims 9-10, 17-18 and 21-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson as applied to claims 1-2 and 9 above, and further in view of USPN 6787937 (hereinafter Mody).

Regarding claims 9 and 17, Erickson discloses the limitations of claims 1-2 and 9 as noted above, however does not expressly disclose the gear mechanism being in the form of a tooth belt drive. At the time the claimed invention was made, it would have been obvious to a person of ordinary skill in the art to have the gear mechanism be in the form of a tooth belt drive. The motivation for this comes from the fact that Mody discloses a method of operating a remote operated circuit breaker panel and specifically discloses that the actuators could have been employed differently, such as through the

use of a belt driver actuator or tooth belt drive (col. 4, lines 22-30). This would have allowed for a simplification of the design as well as an increase in efficiency.

Regarding claims 10, 18 and 21-22, it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the toothed belt drive with a transmission ratio of 1:1 to 1:6 or of 1:3.5, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

#### ***Response to Arguments***

9. Applicant's arguments with respect to the prior art rejections of claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments filed 10/29/2007 have been fully considered but they are not persuasive. Specifically concerning the indefiniteness rejection of claims 8 and 16, Examiner disagrees that the Applicant's specification provides sufficient explanation for the claimed subject matter. Further clarification, perhaps in the form of additional drawings, is needed.

#### ***Conclusion***

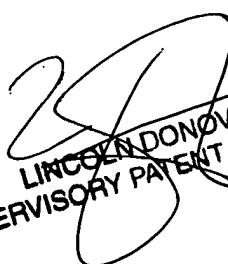
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL BRANDT whose telephone number is (571)270-1745. The examiner can normally be reached on Monday through Thursday 7:30a.m. - 6:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MB  
mb



LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER